

ABSTRACT OF THE DISCLOSURE

A probe to measure particulates suspended in molten metal includes an inner tube forming a receiving chamber. The tube includes an orifice permitting molten metal to flow into the chamber. A gas passageway extends out of the tube for connection to a vacuum source. A first electrode
5 including a first member extends into the chamber. A second electrode surrounds a portion of the tube. The first and second electrodes connect to a measurement device for measuring changes in the electrical potential produced by particulates passing through the orifice. A liquidus depressing material within the chamber lowers the liquidus temperature of the molten metal and permits a longer period for measuring particulates therein. A second member is connected to the gas
10 passageway at a first end of the second member. A chill block spaced from the liquidus depressing material is attached to a second end of the second member.